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DATE MAILED: 05/18/2009

# NOTICE OF ALLOWANCE AND FEE(S) DUE

25889 7590 05/18/2009

COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576

| EXAMINER          |              |  |  |  |  |  |
|-------------------|--------------|--|--|--|--|--|
| PETKOVSEK, DANIEL |              |  |  |  |  |  |
| ART UNIT          | PAPER NUMBER |  |  |  |  |  |
| 2874              | •            |  |  |  |  |  |

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/575,125
 04/07/2006
 Andreas Neyer
 NEYER ET AL-1 PCT
 9253

TITLE OF INVENTION: METHOD FOR THE PRODUCTION OF ELECTROOPTICAL PRINTED CIRCUIT BOARDS COMPRISING POLYSILOXANE WAVE GUIDES AND USE THEREOF

| APPLN, TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$755         | \$300               | \$0                  | \$1055           | 08/18/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| appropriate. All further indicated unless correcte maintenance fee notificat  | correspondence includir<br>d below or directed oth  | or transmitting the IS<br>ig the Patent, advance<br>nerwise in Block 1, by                                      | orders and notification of r<br>(a) specifying a new corres  | naintenance fees will<br>pondence address; a   | I be mailed to<br>nd/or (b) indic   | the current of<br>ating a separ  | orrespondence address as<br>ate "FEE ADDRESS" for  |
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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  |   |   |  | Note: A certificate of mailing can only be used for domestic mailings of the<br>Fee(s) Transmittal. This certificate cannot be used for any other accompanying<br>papers. Each additional paper, such as an assignment or formal drawing, must<br>have its own certificate of mailing or transmission. |   |  |  |
| COLLARD & 1077 NORTHER<br>ROSLYN, NY 1  | N BOULEVARD   | V2009   |  | Certi  | ficate of Mailir  | or Transm  |  |
|   |   |   |  |  |   |  | (Depositor's name)   |
|   |   |   | <u> </u>   |  |   |  | (Signature)  |
|   |   |   |  |  |   |  | (Date)   |
| APPLICATION NO.   | FILING DATE   |   | FIRST NAMED INVENTOR   | 1  | ATTORNEY DO   | CKET NO.   | CONFIRMATION NO.   |
| 10/575,125  | 04/07/2006  |   | Andreas Neyer  |  | NEYER ET AI   | -I PCT   | 9253   |
| TITLE OF INVENTION<br>WAVE GUIDES AND U   |   | PRODUCTION OF EL  | ECTROOPTICAL PRINTEI   | CIRCUIT BOARD  | S COMPRISIN   | G POLYSIL  | OXANE  |
| APPLN, TYPE   | SMALL ENTITY  | ISSUE FEE DUE   | PUBLICATION FEE DUE  | PREV. PAID ISSUE   | FEE TOTAL   | FEE(S) DUE   | DATE DUE   |
| nonprovisional  | YES   | \$755   | \$300  | \$0  | 5   | 1055   | 08/18/2009   |
| EXAM  | INER  | ART UNIT  | CLASS-SUBCLASS   |  |   |  |  |
| PETKOVSE  | K, DANIEL   | 2874  | 385-014000   | •  |   |  |  |
| "Fee Address" indi<br>PTO/SB/47; Rev 03-0<br>Number is required.  3. ASSIGNEE NAME A  | ondence address (or Cha<br>1/122) attached.<br>cation (or "Fee Address<br>2 or more recent) attach  | " Indication form<br>ed. Use of a Customer  | or agents OR, alternative  | 3 registered patent vely, e firm (having as a n igent) and the names meys or agents. If no printed. e)   | nember a 2_<br>of up to<br>o name is 3_   | elow, the do   | cument has been filed for  |
| (A) NAME OF ASSIC   | SNEE  |   | (B) RESIDENCE: (CITY   | and STATE OR CO  | UNTRY)  |  | _  |
| 4a. The following fee(s) a  ☐ Issue Fee ☐ Publication Fee (N ☐ Advance Order - #  | o small entity discount p   | permitted)  | 4b. Payment of Fee(s): (Plea  A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo                                       | d. Form PTO-2038 i   | s attached.   |  |  |
|   | SMALL ENTITY state  | as. See 37 CFR 1.27.  | ☐ b. Applicant is no lon   |  |   |  |  |
| NOTE: The Issue Fee and<br>interest as shown by the r   | I Publication Fee (if requeords of the United Sta   | uired) will not be accep<br>tes Patent and Tradem   | oted from anyone other than t<br>ark Office.   | he applicant; a regist   | ered attorney or  | agent; or the  | assignee or other party in   |
| Authorized Signature  |   |   |  | Date   |   |  |  |
| Typed or printed name   |   |   |  | Registration No  |   |  |  |
| This collection of informan application. Confident submitting the completed this form and/or suggestit Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C<br>iality is governed by 35<br>application form to the<br>ons for reducing this bu-<br>irginia 22313-1450. DC<br>13-1450. | CFR 1.311. The information of U.S.C. 122 and 37 CF USPTO. Time will writen, should be sent to D NOT SEND FEES O | ntion is required to obtain or r<br>R 1.14. This collection is est<br>ary depending upon the indiv<br>the Chief Information Office<br>R COMPLETED FORMS TO | etain a benefit by the<br>imated to take 12 mi<br>idual case. Any com<br>r, U.S. Patent and To<br>THIS ADDRESS.  | public which i<br>nutes to compl-<br>iments on the a<br>rademark Office<br>SEND TO: Cor | s to file (and<br>ete, including<br>mount of tim<br>e, U.S. Depar<br>nmissioner fo | by the USPTO to process)<br>gathering, preparing, and<br>e you require to complete<br>truent of Commerce, P.O.<br>or Patents, P.O. Box 1450, |

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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| APPLICATION NO.                             | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------|----------------------|---------------------|------------------|
| 10/575,125                                  | 04/07/2006    | Andreas Neyer        | NEYER ET AL-1 PCT   | 9253             |
| 25889 75                                    | 90 05/18/2009 |                      | EXAMINER            |                  |
| COLLARD & RO                                | DE, P.C.      | PETKOVSEK, DANIEL    |                     |                  |
| 1077 NORTHERN BOULEVARD<br>ROSLYN, NY 11576 |               |                      | ART UNIT            | PAPER NUMBER     |
|   |               |                      | 2874                |                  |

DATE MAILED: 05/18/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 99 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 99 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/575,125 NEYER ET AL. Notice of Allowability Examiner Art Unit DANIEL PETKOVSEK 2874 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to RCE filed May 5, 2009. The allowed claim(s) is/are 1-28. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \( \overline{\text{ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date 5/5/09 8. X Examiner's Statement of Reasons for Allowance 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material Other .

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# DETAILED ACTION

This office action is in response to the RCE with IDS filed May 5, 2009. Claims 1-28 are pending.

# Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on May 5, 2009 has been entered.

### Information Disclosure Statement

 The prior art documents submitted by Applicant in the Information Disclosure Statements filed on May 5, 2009, have been considered and made of record (note attached copy of forms PTO-1449).

# Allowable Subject Matter

 Claims 1-28 are allowed. The following is an examiner's statement of reasons for allowance: the closest prior art of record (Kaneko et al. U.S.P. No. 6,088,492;
 Kopetz et al. NPL: Ouchi US 2003/0179979 A1: and De Dobbelaere et al. U.S.P. No. Application/Control Number: 10/575,125 Page 3

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5,764,820) does not teach or reasonably suggest, *in combination*, the specific method for the production of an electro-optic printed circuit board (PCB) as claimed. In particular, there is no teaching or reasonable suggestion from the prior art of record to create the PCB with electrically conductive elements in which *polysiloxane* material is used for the optical layer as a *channel* waveguide(s), while further a *casting mold is used as a negative mold*, in which a mechanical connection between the optical waveguide layer and the at least one layer of electrically conductive PCB layers is produced in *direct* connection with the production of the optical waveguide layer (sole independent method claim 1, claims 2-28 dependent therefrom).

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Inventorship

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL PETKOVSEK whose telephone number is (571) 272-4174. The examiner can normally be reached on M-F 8:30-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen Chau Le can be reached on (571) 272-2397. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.